Home Networking Communications Protocols									
Protocol	Communications Domain					Protocol Type			Note
	Gateway	Network Configur- ation	User Interface	Upper OSI Layers	Lower OSI Layers	Standard	Consortium	Proprietary	
CEBus				Х	All media	ANSI			
DS2					PLC-BB		Univ. PL Cons.		PLC broadband
Echonet				Х	All media	ISO/IEC	Echonet Cons.		
Ethernet					TP	IEEE/ISO			TP = twisted-pair wires
FireWire					TP	IEEE	1394 Trade Assn.		Streaming data - 1394
HomeGate	Х					ISO/IEC			Residential gateway
HomePlug					PLC-BB		HomePlug Alliance		PLC broadband
HomePNA					TP		HPNA Alliance		Telephone lines
IEEE 802.15.4					RF	IEEE			Used by ZigBee
IGRS		Х				ISO/IEC	IGRS Group		, ,
Insteon				Х	PLC, RF		,	Х	
IPv6LoPAN					RF	IETF			
KNX				Х	RF, PLC, TP	ISO/IEC	KNX Association		PLC narrowband
LonTalk					RF, PLC, TP	ISO/IEC	LonMark Interop.		PLC narrowband
MoCA					Coax		MoCA		Ethernet on Coax
Panasonic PLC					PLC-BB		HD-PLC		PLC broadband
Product Interop.	Х					ISO/IEC			Links applications
Serial master-slave					TP	EIA-485			Driver/receiver spec.
Serial point-point					TP	EIA-232			Driver/receiver spec.
Univ. Remote Control			Х			ISO/IEC			UI tailored to customer
UPB					PLC			Х	
UPnP		Х				ISO/IEC	UPnP Forum		
WiBeem					RF	ISO/IEC			
WiFi					RF	IEEE	WiFi Alliance		
X-10					PLC			Х	PLC narrowband
Yitran					PLC		HomePlug Alliance		PLC narrowband
Z-Wave				Х	RF		Z-Wave Alliance		0
ZigBee				X	RF		ZigBee Alliance		Uses IEEE 802.15.4
NOTES:					nged alphabet	ically, withou	t regard to market pe	enetration	
	ANSI = American National Standards Institute								
	ISO = International Organization for Standardization								
	IEC = International Electrotechnical Commission								
	EIA = Electronic Industries Alliance (EIA standards are now managed by the CEA, Consumer Electronics Ass								tion)
	IEEE = Institute of Electrical and Electronic Engineers								
	IETF = Intern	net Engineerin	ig Task Force)					